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10/601,320

06/19/2003

Ye-Kui Wang

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EXAMINER

TRAN, PHILIP B

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/601,320

Applicant(s)

WANG, YE-KUI

Examiner

Philip B. Tran

Art Unit

2455

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Figures 1, 2, 3, 4a and 4b should be noted as PRIOR ART as indicated in the background of the invention section (see Pages 1-7) of the instant application. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-4, 7-9, 12-16, 19-22 and 24 are rejected under 35 U.S.C. 102(a) as being anticipated by the Admitted Prior Art (Hereafter, APA), Background of the Invention (Pages 1-7 of the Specification of the instant Application).

Regarding claim 1, APA teaches a signaling method for use in stream switching among a plurality of bitstreams, comprising:

providing in the bitstreams information indicative of a switching point so that said stream switching can be carried out based on the provided information (i.e., to enable

switching from one bitstream to another, the switched-to bitstreams must contain switching points) [see Page 1, Lines 20-22], wherein the bitstreams containing video data indicative of a plurality of video frames for each bitstream (i.e., bitstreams containing video data) [see Page 1, Lines 14-19], wherein the bitstreams comprise at least one switching point so as to allow switching from a first bitstream to a second bitstream at said switching point (i.e., switching point) [see Page 1, Lines 20-24], and at least one recovery point which defines a first correct or approximately correct picture in output order in the second bitstream decoded in a client subsequent to said stream switching (i.e., recovery point) [see Page 1, Lines 25-27], and wherein

the recovery point is different from the switching point (i.e., the random access point is the switching point and if the switching point is different from the recovery point, the random access operation is Gradual Decoder Refresh (GDR)) [see Page 1, Line 27 to Page 2, Line 1].

Regarding claim 2, APA further teaches the signaling method of claim 1, wherein each video frame comprises one or more slices and the video frames contain at least one isolated region associated with said one or more slices in the second bitstream decoded subsequent to said stream switching, and wherein the provided information is further indicative of the isolated region (i.e., isolated region) [see Page2, Lines 4-8].

Regarding claim 3, APA further teaches the signaling method of claim 1, wherein the bitstreams are conveyed from a server device to a client device in a streaming

network, and wherein said stream switching is initiated by the server device [see Page 2, Lines 1-18].

Regarding claim 4, APA further teaches the signaling method of claim 1, wherein the bitstreams are conveyed from a server device to a client device in a streaming network, and wherein said stream switching is requested by the client device [see Page 2, Lines 9-18].

Regarding claim 7, APA further teaches the signaling method of claim 1, wherein said stream switching is carried out in transmission of the video data based on transmission conditions between a server device and a client device in a streaming network [see Fig. 3 and Page 5, Line 29 to Page 6, Line 15].

Claim 8 is rejected under the same rationale set forth above to claim 1.

Claim 9 is rejected under the same rationale set forth above to claim 2.

Claim 12 is rejected under the same rationale set forth above to claim 7.

Claim 13 is rejected under the same rationale set forth above to claim 1. In addition, APA further teaches at least one streaming client and at least one streaming server for transmitting one of the bitstreams to the streaming client so as to allow the streaming client to reconstruct the video frames based on the transmitted bitstream, wherein the streaming server comprises a stream selector for selecting the first

bitstream for transmission and for further selecting the second bitstream [see Figs. 1-3 and Page 5, Line 29 to Page 6, Line 15].

Claims 14-16 are rejected under the same rationale set forth above to claims 2-4.

Claim 19 is rejected under the same rationale set forth above to claim 7.

Regarding claim 20, APA further teaches the streaming system of claim 13, further characterized by a video encoder to convert a video input signal into the video data and means, responsive to the video data, for encoding the video data into the plurality of bitstreams [see Figs. 1-3 and Page 5, Line 29 to Page 6, Line 15].

Claim 21 is rejected under the same rationale set forth above to claim 1.

Claim 22 is rejected under the same rationale set forth above to claim 2.

Claim 24 is rejected under the same rationale set forth above to claim 7.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-6, 10-11, 17-18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Hereafter, APA), Background of the Invention

(Pages 1-7 of the Specification of the instant Application) in view of Srikantan et al (Hereafter, Srikantan), U.S. Pat. Application Pub. No. US 2001/0029548.

Regarding claim 5, APA does not explicitly teach the signaling method of claim 1, wherein the signaling method is used in a transmission utilizing Real-time Transport Protocol (RTP). However, Srikantan, in the same field of media streaming endeavor, discloses using Real-time Transport Protocol (RTP) [see Paragraphs 0003 & 0027]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Srikantan into the teaching of APA in order to efficiently transport real-time data (audio and video) in the network and provide quality of service (QoS) feedback.

Regarding claim 6, APA does not explicitly teach the signaling method of claim 5, wherein a Session Description Protocol (SDP) is used to convey information indicative of characteristics of the first and second bitstreams. However, Srikantan, in the same field of media streaming endeavor, discloses using Session Description Protocol (SDP) [see Paragraphs 0027 & 0064]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Srikantan into the teaching of APA in order to efficiently describe the type of multimedia (e.g., video) sessions.

Claims 10-11 are rejected under the same rationale set forth above to claims 5-6.

Claims 17-18 are rejected under the same rationale set forth above to claims 5-6.

Claim 23 is rejected under the same rationale set forth above to claim 6.

Response to arguments

6. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

7. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (571) 272-3991. The Group fax phone number is (571) 273-8300. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar, can be reached on (571) 272-4006.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip B Tran/
Primary Examiner, Art Unit 2455
October 24, 2008